said door being selectively closable so that when closed, the chamber is substantially isolated from the outside environment;

a gas processing device having an intake and first and second outlets, said device taking in an intake gas mixture through said intake and emitting a reduced-oxygen gas mixture having a lower concentration of oxygen than said gas mixture through said first outlet and enriched-oxygen as mixture having a greater concentration of oxygen than said gas mixture through said second outlet;

a gas-recycling conduit connected to said intake and communicating with said closed space allowing drawing of internal gas mixture from said closed space into said intake which takes in ambient air from the outside environment and wherein this internal gas mixture is mixed with the ambient air providing said intake gas mixture for processing in said gas processing device;

said first outlet being connected with said chamber so that reduced oxygen gas mixture is emitted into said closed space inside the chamber;

said gas processing device comprising a pump receiving the gas mixture from the intake and a separation unit with a reduced oxygen mixture conduit and an enriched oxygen mixture conduit;

said first outlet being operatively associated with said reduced oxygen mixture conduit and receiving said reduced oxygen gas mixture therefrom, said second outlet being operatively associated with said enriched oxygen mixture conduit and receiving said enriched oxygen gas mixture therefrom and releasing said mixture into the outside environment.

9. The invention according to claim **8** and

said reduced oxygen mixture conduit having filter means providing the separation of the transmitted gas mixture from airborne particles and dust.

10. The invention according to claim **8** and

said hypoxic system having external gas recirculation unit with inlet and outlet, both communicating with the closed space inside said chamber;

said inlet being connected to gas collecting means inside said chamber and said outlet having airtight connection to gas releasing means distributing emitted from said outlet gas mixture inside said chamber.

11. The invention according to claim **10** and

said gas collecting means can be perforated ducts surrounding lower inside portion of said chamber and/or floor panels having perforations in upper sides and establishing a hollow structure airtight to the outside environment and communicating with said inlet;

said gas releasing means consisting of hood having airtight connection to wall structure of said chamber and separated from said chamber by perforated ceiling which allows gas mixture emitted under hood to penetrate into said chamber and create vertical laminar flow of hypoxic gas mixture.

12. The invention according to claim **10** and

said gas recirculation unit having a filter for cleaning recirculating gas mixture from airborne particles and providing temperature and humidity control of said gas mixture.

13. The invention according to claim **8** and

said door being preferably flexible door having synthetic flaps in rigid frame;

said chamber having anteroom with entry and preferably rigid door communicating with another anteroom having standard airshower equipment and flexible flap door;

said rigid door having pressure relief valves for releasing excessive gas mixture from said chamber;

said chamber having hypoxic cleanroom environment inside complying with cleanroom classes from 0.1 to 100,000.

14. The invention according to claim **8** and

said chamber being enclosure used for: manufacturing and packaging of electronic components, chemical, biological, pharmaceutical and other medical products; processing, packaging, storage and transportation of food products, explosive and corrosive materials; protection from intruders or biological contaminants; and other industrial applications which may require microenvironments with low oxygen content.

15. The invention according to claim **10** and

said gas mixture inside said chamber having oxygen content ranging from 0.01% to 20.9%.

16. The invention according to claim **8** and

said chamber being food storage cabinet for household or industrial applications with optional climate control.

17. The invention according to claim **8** and

said chamber being transportation container with temperature and humidity control;

said gas processing device being installed inside or outside said container.

18. A hypoxic system for food storage or transportation and other industrial or household applications, said system comprising:

a chamber comprising a door and wall structure substantially isolating an internal environment inside said chamber;

an oxygen-extraction device having first and second outlet and an intake comprising first and second inlet;

said intake communicating with the internal environment through said first inlet and receiving internal gas mixture from it;

said second inlet communicating with the atmosphere outside said chamber and receiving an ambient air for adding to the internal gas mixture transmitted through the first inlet and creating an intake gas mixture, said intake gas mixture being separated by the oxygen-extraction device into oxygen-reduced fraction and oxygen-enriched fraction;

said first outlet communicating with said internal environment and transmitting said oxygen-reduced fraction to this internal environment, said second outlet transmitting said oxygen-enriched fraction and releasing it into external atmosphere;

said internal environment having temperature and humidity control.

19. The invention according to claim **18** and

said oxygen-extraction device employing Pressure-swing adsorption technology for separating said intake gas mixture into said oxygen-reduced and said oxygen enriched fractions;

said intake not communicating with said internal environment and said first inlet being absent; said intake gas mixture being ambient air.

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